Listing of Claims:

Claims 1-26 (Canceled)

27. (Currently Amended) An information recording medium, comprising:

a first substrate, and

a first recording layer for recording information, including Ge, Sn, Sb, and Te, the first recording layer being formed of a composition in a range surrounded by points a, b, c on three dimensional coordinate axes defining atomic % of Ge-Sn, Sb and Te, where Ge-Sn represents a total of Ge and Sn, the coordinates of point a are (50, 0, 50), the coordinates of point b are (0, 40, 60) and the coordinates of point c are (0, 57.1, 42.9), the composition excluding the points a, b and c and a line b-c, ~~and~~

the recording layer having a thickness of 9 nm or less.

28. (Previously Presented) The information recording medium according to claim 27, comprising a second recording layer for recording information.

29. (Previously Presented) The information recording medium according to claim 28, comprising an intermediate layer disposed between the first information layer and the second information layer.

30. (Previously Presented) The information recording medium according to claim 27, wherein the first recording layer is made of a material represented by a composition formula: $(Ge\text{-}Sn)_A Sb_B Te_{3+A}$, where $2 \leq A \leq 22$ and $2 \leq B \leq 4$.

31. (Previously Presented) The information recording medium according to claim 27, wherein a transmittance Tc (%) of the first information layer in a case where the first recording layer is in a crystal phase, and a transmittance Ta (%) of the first information layer in a case where the first recording layer is in an amorphous phase satisfy $40 \leq (Tc + Ta)/2$ with respect to a laser beam having a wavelength in a range of 390 nm to 430 nm.

32. (Currently Amended) A method for producing an information recording medium, comprising:

forming a first substrate, and

forming a first recording layer for recording information on the first substrate; the first recording layer including Ge, Sn, Sb, and Te,

the first recording layer being formed of a composition in a range surrounded by points a, b, c on three dimensional coordinate axes defining atomic % of Ge-Sn, Sb and Te, where Ge-Sn represents a total of Ge and Sn, the coordinates of point a are (50, 0, 50), the coordinates of point b are (0, 40, 60) and the coordinates of point c are (0, 57.1, 42.9), the composition excluding the points a, b and c and a line b-c, ~~and~~

the first recording layer having a thickness of 9 nm or less.

33. (Previously Presented) The method according to claim 32, further comprising forming a second recording layer for recording information.

34. (Previously Presented) The method according to claim 33, comprising forming an intermediate layer between the first information layer and the second information layer.

35. (Currently Amended) A method for recording information on an information recording medium comprising

a first recording layer including Ge, Sn, Sb, and Te,

the first recording layer being formed of a composition in a range surrounded by points a, b, c on three dimensional coordinate axes defining atomic % of Ge-Sn, Sb and Te, where Ge-Sn represents a total of Ge and Sn, the coordinates of point a are (50, 0, 50), the coordinates of point b are (0, 40, 60) and the coordinates of point c are (0, 57.1, 42.9), the composition excluding the points a, b and c and a line b-c, ~~and~~

the first recording layer having a thickness of 9 nm or less,

the method comprising[[;]]

generating a laser beam; and

recording information on the first recording layer by the laser beam.

36. (Previously Presented) The method according to claim 35, wherein the information recording medium further comprises a second recording layer, and the method comprises recording information on the second recording layer.

37. (Previously Presented) The method according to claim 35, wherein a wavelength of the laser beam is in a range of 390 nm to 430 nm.

38. (Currently Amended) A method for reproducing information from an information recording medium comprising

a first recording layer including Ge, Sn, Sb, and Te,

the first recording layer being formed of a composition in a range surrounded by points a, b, c on three dimensional coordinate axes defining atomic % of Ge-Sn, Sb and Te, where Ge-Sn represents a total of Ge and Sn, the coordinates of point a are (50, 0, 50), the coordinates of point b are (0, 40, 60) and the coordinates of point c are (0, 57.1, 42.9), the composition excluding the points a, b and c and a line b-c, ~~and~~

the first recording layer having a thickness of 9 nm or less,

the method comprising[[;]]

generating a laser beam; and

reproducing information from the first recording layer by the laser beam.

39. (Previously Presented) The method according to claim 38, wherein the information recording medium comprises a second recording layer, and the method comprises reproducing information from the second recording layer.

40. (Previously Presented) The method according to claim 38, wherein a wavelength of the laser beam is in a range of 390 nm to 430 nm.